ing a vehicle's movement and determining a sonic and/or visual alarm which is appropriate to the venue and/or required for the safety of surrounding workers or pedestrians.

[0017] The system controller will be in electronic communication with the ignition switch or with other components which are energized during a starting of the engine of the vehicle in which it is positioned. Upon receipt of an electronic start signal, determined in advance to be a signal that the driver has initiated a switch or key to start the engine of the vehicle, the software running on the controller to the task, will energize the horn on the vehicle to elicit a sound such as a honk which is predetermined to be one that workers are taught to listen for, such as a honk one time. Concurrently, software running on or in communication with the controller will cause strobe lights positioned on at least the front and rear of the vehicle to flash once.

[0018] For this warning to surrounding persons about the vehicle during an engine starting, and for all the other warnings provided by the system herein, software running on the controller operating to the task, will actuate both the horn to generate an unique audible signal and will actuate the strobe lights to generate a unique and visual alarm which correlates to the audible signal. These concurrent audible and visual warnings during experimentation with the system herein, have shown to provide a synergistic combination of warnings which have shown to work better in combination than either the sonic of visual signal singularly.

[0019] This is especially true where pedestrians and workers proximate to the vehicle may be hard of hearing or wearing earphones or listening to sound through ear buds. The bright flash of a strobe light, even in peripheral vision, will capture their instant attention. For those who may be faced away from the vehicle during such sonic and flashing warnings, the sound will cause them to become aware of the proximate vehicle, and if generated at the proper frequency and volume, it will still be audible even if they are wearing headphones.

[0020] The controller will be in electronic communication with a direction sensor connected with the vehicle transmission selector or with electric circuits which correlate to a direction selection by the driver, such as reverse lights, or to the drive shaft to determine a rotational direction and vehicle direction. With the vehicle engine determined to be running, once a driver engages the transmission which will cause the vehicle to move in a selected direction, the system herein will generate different audible and visual warnings of such.

[0021] As an example, when the direction sensor communicating with the direction selection of the transmission, communicates to the controller, that a forward drive has been selected, software operating to the task on the controller will cause the horn to honk twice and concurrently or sequentially cause the strobe lights to also flash twice. As with the concurrent warning for engine start up, the system generates both of these audible and visible warnings to take advantage of the increased perception that humans will have of this synergistic combination.

[0022] The selection to move a vehicle in reverse, for most drivers, generates the most significant potential for injury to surrounding pedestrians and workers. This is because the driver cannot see the surrounding area when moving in reverse because portions of the vehicle itself block their view and because, in most vehicles, the driver seat faces forward, thus, requiring the driver to strain to turn their neck to attempt to see some of the surroundings behind and on the sides of the vehicle.

[0023] When the driver employs the transmission selector and moves it in order to move the vehicle toward the rear or in reverse, such is communicated to the controller by the engaged direction sensor and the direction determining software running in memory of the controller or communicating with it. The direction determining software then generates an electronic signal to cause a sound generator or horn to honk three times and to actuate the rear facing strobe lights and to also flash three times simultaneously with the horn. Additionally, because of the increased danger caused by the poor view of a driver moving in reverse, so long as the vehicle is powered to move in the reverse direction, the horn will continue to honk or generate sound and the rear facing light emitters such as strobe lights, will continue to flash on an ongoing basis. For example, the concurrent horn and strobe lights might honk and flash three times every five seconds until the transmission selector is shifted out of reverse position wherein the directional software determining vehicle directional movement would cause such to cease.

[0024] A further vehicle alarm to surrounding workers and pedestrians will be provided by actuation by the driver of an emergency signaling button. Once actuated, the emergency button or switch will communicate an emergency signal to the controller. Upon receipt of such an emergency signal, the software running on the controller running to the task will cause an emergency signaling of both the horn and the strobe lights, which is different from all the other signals. For example, the software running to ascertain an emergency running on the controller will generate a signal to actuate the horn and all forward and rearward facing strobe lights to activate simultaneously for four honks and four flashes. This emergency signal will continue to be issued and sounds and lights actuated, for example, every fifteen seconds until the emergency button or switch is deactivated, such as by a second signal therefrom. Of course, as with the other concurrent flashing and horn honking signals herein, the number thereof and duration thereof may be altered.

[0025] Particularly preferred in the system herein is the inclusion of a microphone or vehicle-surrounding noise sensor which communicates an electronic signal to the controller of the system and noise determination software running thereon which operates to the task of determining the surrounding sounds which currently surround the working vehicle for both the sound frequencies and volumes thereof. Employing an electronic database correlating sounds and frequencies thereof which are best heard by humans, in an environment having the sensed surrounding sounds, the noise determination software running on the controller herein can signal the controller to alter both the volume and the frequency of the sound generated by the sonic alarm, such as a horn or loudspeaker.

[0026] As used herein it should be noted that the term horn is employed for convenience. As used, a horn is intended to mean any sound generating device which when energized electrically or mechanically produces a sound as a sonic alarm. Where the term horn is used for a system herein which senses existing vehicle-surrounding sounds, and then generates sounds most easily heard by humans being subjected to such surrounding sounds, the horn can be a loudspeaker, conventional transducer, a piezoelectric trans-